

B20
Bent
a layered diffraction optical device laminated with a plurality of diffraction elements,
wherein said layered diffraction optical device is provided in front of said iris,

wherein said layered diffraction optical device includes a first diffraction element of
negative power and a second diffraction element of positive power provided behind said
first diffraction element.

B21
3. (Amended) An optical system according to Claim 1,

wherein said first diffraction element and said second diffraction element are made
of materials having dispersion characteristics different from each other.

4. (Amended) An optical system according to Claim 1,
wherein an air layer is interposed between said first diffraction element and said
second diffraction element.

6. (Amended) An optical system according to Claim 1,

wherein said diffraction optical device is formed to have high diffraction efficiency for diffracted light of a particular order over an entire wavelength range to be used in said optical system.

7. (Amended) An optical system according to Claim 1 further comprising, a refraction optical device.

8. (Amended) An optical system according to Claim 1, wherein a wavelength range to be used in said optical system is a visible range.

Please add new Claims 11-16 as follows:

-11. (New) An optical system comprising:

an iris, and
a layered diffraction optical device laminated with a plurality of diffraction elements, wherein said layered diffraction optical device is provided behind said iris,
wherein said layered diffraction optical device includes a first diffraction element of positive power and a second diffraction element of negative power provided behind said first diffraction element.

12. (New) An optical system according to Claim 11,

wherein said first diffraction element and said second diffraction element are made of materials having dispersion characteristics different from each other.

Benchi
Surge
~~13. (New) An optical system according to Claim 11,~~

~~wherein an air layer is interposed between said first diffraction element and said second diffraction element.~~

14. (New) An optical system according to Claim 11,

wherein said diffraction optical device is formed to have high diffraction efficiency for diffracted light of a particular order over an entire wavelength range to be used in said optical system.

Surge
~~15. (New) An optical system according to Claim 11, further comprising:~~

~~a refraction optical device.~~

16. (New) An optical system according to Claim 11,

wherein a wavelength range to be used in said optical system is a visible range.
